



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/590,355	12/14/2006	Tetsuo Imai	Q96707	8169
23373 7590 04/01/2009 SUGHRUE MION, PLLC 2100 PENNSYLVANIA AVENUE, N.W. SUITE 800 WASHINGTON, DC 20037				
EXAMINER				
LEE, ANDREW CHUNG CHEUNG				
ART UNIT		PAPER NUMBER		
2419				
MAIL DATE		DELIVERY MODE		
04/01/2009		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/590,355

Applicant(s)

IMAI ET AL.

Examiner

Andrew C. Lee

Art Unit

2419

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 December 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SI/02)
Paper No(s)/Mail Date 12/14/2006, 8/23/2006
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. This Office Action in response to the Application No. 10590355 filed on 12/14/2006 is entered.
2. Claims 1 – 7 are entered and presented for examination.

Priority

3. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Information Disclosure Statement

4. The information disclosure statement (IDS) submitted on 12/14/2006, 8/23/2006 was filed, and the submission is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

Specification

5. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Objections

6. Claims 1, 2, 3, 4, 5, 6, 7 are objected to because of the following informalities:
Regarding claim 1, the term "contorolling" is a typo. Appropriate correction is required.

Regarding claims 3, 6 and 7, claims 3 and 6 and 7 have the same deficiencies as claim 1. "contorolling" is a typo. Appropriate correction is required.

Regarding claim 2, the indefinite article "A" in the clause "A network system", should be changed to the definite article "The", since claim 2 refers to claim 1 as the network system. Appropriate correction is required.

Regarding claims 4, 5, the indefinite article "A" in the clause "A process migration method" should be changed to the definite article "The", since claims 4 and 5 refer to claim 3 as the migration method. Appropriate correction is required.

Claim Rejections - 35 USC § 101

7. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claim 7 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Regarding claim 7, the claim is merely a program claim, per se. Since computer programs claimed as computer listings per se, i.e., the descriptions or expressions of the programs, are not physical "things." They are neither computer components nor statutory processes, as they are not "acts" being performed. Such claimed computer programs do not define any structural and functional interrelationships between the computer program and other claimed elements of a computer which permit the computer program's functionality to be realized. Besides, the claimed subject matter "a program" is not claimed as embodied in computer-readable media are descriptive material per se and are not statutory because they are not capable of causing functional

change in the computer. See, e.g., Warmerdam, 33 F.3d at 1361, 31 USPQ2d at 1760 (claim to a data structure per se held nonstatutory).

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

9. Claims 1 – 7 are rejected under 35 U.S.C. 102(e) as being anticipated by Hayashi et al. (US 6598071 B1).

Regarding claims 1, 6, Hayashi et al. disclose a network system, a server/network cooperation control device (*Fig. 1, Fig. 6*) comprising: connection control means for controlling the switching of the connection destination of a terminal ("*router*"; *Fig. 4, col. 6, lines 29 – 43*);

first and second servers belonging to first and second different networks, respectively and connected to the terminal, respectively through the first and second networks ("*current server*" as first server, and "*backup server*" as second sever, and have different network; *Fig. 1, col. 5, lines 34 - 45*); operating server-switching control means for migrating a process from the first server to the second server ("*element 404 server switcher*"; *Fig. 4, col. 6, lines 37 – 43*); and server/network cooperation control

means having a storage unit for storing the information of the first and second servers and the information of the second network, and connected to the operating server-switching control means and to the connection control means (*"controller and memory"; Fig. 2, col. 5, lines 52 – 62*), wherein the server/network cooperation control means comprises information processing means for executing processing for receiving a process migration request from the first server to the second server and sending a migration start request including the information of the second server as a migration destination stored in the storage unit to the operating server-switching control means (*col. 7, lines 56 – 67*), and processing for receiving a target process migration completion notification from the operating server-switching control means and sending a switching request from the first network to the second network to the connection control means, the switching request including the information of the second network stored in the storage unit (*Fig. 2, col. 5, lines 66 – 67, col. 6, lines 1 – 10; col. 7, lines 44 – 60, col. 8, lines 26 – 45*), and the connection control means and the first and second servers execute communication using a transport level protocol (*"TCP/IP"; col. 7, lines 47 – 50*).

Regarding claim 2, Hayashi et al. disclose a network system claimed wherein the operating server-switching control means is included in at least one of the first and second servers (*Fig. 4, col. 6, lines 37 – 43*).

Regarding claim 3, Hayashi et al. disclose a process migration method between networks of a network system (*Fig. 1, Fig. 6, Abstract*) which comprises:

connection control means for controlling the switching of the connection destination of a terminal; first and second servers belonging to first and second different networks, respectively and connected to the terminal, respectively through the first and second networks; operating server-switching control means for migrating a process from the first server to the second server; and server/network cooperation control means connected to the operating server-switching control means and to the connection control means, and in which the connection control means and the first and second servers execute communication using a transport level protocol, wherein the process migration method comprises: a first step at which the server/network cooperation control means receives a process migration request from the first server to the second server, and sends a migration start request including the information of the second server as a migration destination to the operating server-switching control means (*col. 7, lines 56 - 67*); a second step at which the operating server-switching control means migrates a target process from the first server to the second server on receiving the migration start request (*col. 8, lines 26 - 34*); a third step at which the server/network cooperation control means receives a process migration completion notification from the operating server-switching control means and sends a switching request from the first network to the second network to the connection control means, the switching request including the information of the second network (*col. 8, lines 34 -*

45); and a fourth step at which the connection control means switches a target network from the first network to the second network (*col. 8, lines 51 – 58*).

Regarding claim 4, Hayashi et al. disclose a process migration method between networks claimed wherein the target process is put in a pause status before it is migrated to the second server at the second step, and process migration method further comprises a fifth step at which the pause status of the target process migrated between the servers is released after the fourth step (*col. 8, lines 51 – 58*).

Regarding claim 5, Hayashi et al. disclose a process migration method between networks claimed wherein a shiftable connection destination identifier is shifted to the second server at the second step (*col. 8, lines 30 – 34*).

Regarding claim 7, Hayashi et al. disclose a program of a server/network cooperation control computer used in a network system (“a application program processor”; Fig. 2), the network system comprising: connection control means for controlling the switching of the connection destination of a terminal; first and second servers belonging to first and second different networks, respectively and connected to the terminal, respectively through the first and second networks; and operating server-switching control means for migrating a process from the first server to the second server, and in which the connection control means and the first and second servers execute communication using a transport level protocol, wherein the computer is

connected to the operating server-switching control means and the connection control means, and wherein the program causes the computer to execute: (1) processing for receiving a process migration request from the first server to the second server and sending a migration start request including the information of the second server as a migration destination stored in a storage unit of the computer to the operating server-switching control means (*col. 7, lines 56 – 67*); and (2) processing for receiving a target process migration completion notification from the operating server-switching control means and sending a switching request from the first network to the second network to the connection control means, the switching request including the information of the second network stored in the storage unit (*Fig. 2, col. 5, lines 66 – 67, col. 6, lines 1 – 10; col. 7, lines 44 – 60, col. 8, lines 26 – 45*).

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- a) Iwamura et al. (US 20040049553 A1)
- b) Raman et al. (US 6910078 B1).

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew C. Lee whose telephone number is (571)272-3131. The examiner can normally be reached on Monday through Friday from 8:30am - 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edan Orgad can be reached on (571) 272-7884. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Andrew C Lee/
Examiner, Art Unit 2419
<3/09/2009::2Qy09>

/Edan Orgad/
Supervisory Patent Examiner, Art Unit 2419